

IN THE CLAIMS:

1. (currently amended) A stent delivery assembly comprising:

an elongate ~~wire~~ guidewire having a proximal end, a distal end, and a length therebetween;

a radially expandable stent positioned coaxially on and in direct contact with the ~~wire~~ guidewire towards the distal end such that the stent can be placed by and moved by the guidewire;

and

a tubular sheath member covering at least a portion of the ~~wire~~ guidewire wherein the sheath is retractable from a first position where the stent is covered by the sheath to a second position where the stent is uncovered such that the stent is unhindered during sheath retraction.

2. (currently amended) The assembly of claim 1 further comprising a coil disposed at the distal end of the ~~wire~~ guidewire.

3. (original) The assembly of claim 2 wherein the coil is radio-paque.

Claims 4-6 (canceled)

7. (currently amended) The assembly of claim 1 further comprising at least one radio-paque marker band located on the ~~wire~~ guidewire proximally or distally of the stent.

8. (original) The assembly of claim 1 wherein the radially expandable stent is comprised of a radio-paque material.

9. (canceled) The assembly of claim 8 wherein the radio-paque material comprises platinum.

10. (original) The assembly of claim 1 wherein the radially expandable stent is comprised of a shape memory alloy.

11. (canceled) The assembly of claim 10 wherein the shape memory alloy comprises Nitinol.

12. (original) The assembly of claim 1 wherein the sheath further comprises a flush port located near a proximal end of the sheath, wherein the flush port is in fluid communication with a distal end of the sheath.

Claims 13-32 (Canceled)

33. (new) The assembly of claim 1, wherein the stent is releasably connected to the guidewire proximal of a distalmost tip of the guidewire.

34. (new) The assembly of claim 1, wherein the stent is positioned on a reduced diameter portion of the guidewire.

35. (new) The assembly of claim 1, further comprising a stop on the guidewire, the stop having a height less than an internal diameter of the sheath.

36. (new) A stent delivery assembly comprising:

an elongated guidewire having a proximal end portion, a distal end portion, and a intermediate portion between the distal and proximal end portions and configured to be directed to a surgical site;

a stent expandable from a constrained first configuration for delivery to the surgical site to a larger expanded second configuration, the stent mounted coaxially on the guidewire at a position spaced proximally of a distalmost tip of the guidewire so that positioning of the guidewire carries the stent to position the stent at the surgical site; and

a sheath covering a least a portion of the stent and having an internal diameter greater than an outer diameter of the stent in the first configuration, the sheath and guidewire being relatively movable to expose the stent to enable movement to the expanded second configuration.

37. (new) The assembly of claim 36, wherein the stent is releasably connected to the guidewire.

38. (new) The assembly of claim 36, wherein the stent is positioned on a reduced diameter portion of the guidewire.

39. (new) The assembly of claim 36, wherein the stent is comprised of a shape memory alloy.

40. (new) The assembly of claim 36, further comprising at least one radio-paque marker on the guidewire.
41. (new) The assembly of claim 36, further comprising first and second stops on the guidewire to maintain the stent in position on the guidewire.
42. (new) The assembly of claim 41, wherein the first and second stops each have a diameter less than a diameter of an intermediate portion of the guidewire.
43. (new) The assembly of claim 41, wherein the stent is axially spaced from the first and second stops to provide a gap therebetween.
44. (new) The assembly of claim 36, further comprising a stop on the guidewire, the stop having a height less than an internal diameter of the sheath.
45. (new) The assembly of claim 44, wherein the stent is axially spaced from the stop to provide a gap therebetween.